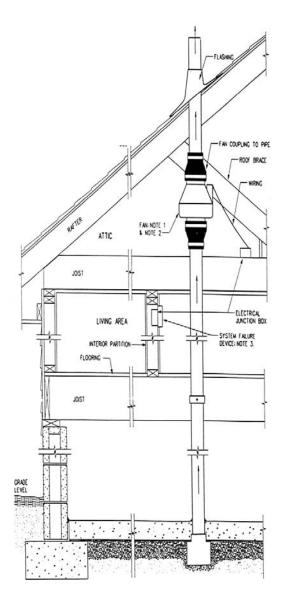
#### **Radon Resistant New Construction**

What is RRNC?
What are the benefits?
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## What is RRNC?

Radon Resistant New Construction (RRNC) comprises specific techniques and building practices that are generally accepted as "standard good building practices" in new home construction. The main components of RRNC for slab construction are:

- A minimum 4" layer of gas permeable material, such as clean gravel
- A continuous layer of polyethylene sheeting over the entire area of the slab (prior to pouring) overlapped at seams a minimum of 12"
- Sealing and caulking of any openings through the slab and foundation walls, such as drains, sumps, utility penetrations, floor wall joints, etc.
- Installation of 3" or 4" PVC pipe that extends several feet through the slab area and to a t-fitting

Electrical junction boxes are installed during construction in case a fan is needed to further reduce radon levels. Normally, suction on the pipe is provided by natural pressure differences within the house. A fan is needed only if these pressure differences cannot lower radon concentrations to acceptable levels.

#### What are the benefits?

Sealing the home to prevent radon entry can result in reduced energy costs. Nationwide these average \$65 per year. It also promotes drainage under a house and can reduce moisture problems. Pipes can more easily be hidden during construction.

### What is the cost?

It is much more cost-effective to install a system during home construction (\$300-800) than to put in a mitigation system after construction (\$800-2000). Some building codes already include some of these features and this lowers the cost.

# Where can I get more information?

More information, including technical documents detailing RRNC techniques, is available from EPA (link to <a href="www.epa.gov/iaq/radon/construc.html">www.epa.gov/iaq/radon/construc.html</a>) or the Tennessee Department of Environment and Conservation at the radon hotline at 1-800-232-1139.